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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/628,817	07/28/2003	Hideki Ozawa	1259-03	5866

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EXAMINER

AHMED, SHEEBA

ART UNIT PAPER NUMBER

1773

DATE MAILED: 11/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/628,817

Applicant(s)

OZAWA ET AL.

Examiner

Sheeba Ahmed

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 August 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,4-13 and 16-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,4-13 and 16-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on August 8, 2005 has been entered.

### ***Response to Amendment***

2. Amendments to claims 1, 12, and 13 have been entered in the above-identified application. Claims 2, 3, 14, and 15 have been cancelled. New claims 22-24 have been added. **Claims 1, 4-13, and 16-24 are now pending.**

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 4-13, and 16-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schlueter, Jr. et al. (US 6,201,945)

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Schlueter, Jr. et al. disclose a polyimide film containing electrically conductive doped metal oxide filler dispersed therein and wherein the polyimide film has a surface resistivity of from  $10^4$  to  $10^{12}$  ohm/sq (Column 4, lines 3-7), a volume resistivity of from  $10^4$  to  $10^{11}$  ohm.cm **(the polyimide film is equivalent to the metal oxide and conductive ultrafine particle mixed layer)** (Column 8, lines 50-60) and has a thickness of from about 25 to about 150 microns thick (Column 8, lines 41-45). The film may have an outer layer **(equivalent to the film upon which the metal oxide and conductive ultrafine particle mixed layer is formed)**. The film is prepared by using a reaction product of a diamine and a dianhydride dissolved in a solvent, adding and dispersing an appropriate amount of filler, casting the mixture of a surface, removing the solvent by evaporation and heating to convert the polyamic acid to polyimide (Column 9, lines 15-30). Preferred doped metal oxides include aluminum doped zinc oxide. Additional conductive filler may be present in the polyimide layer and examples include indium tin oxide. The desired resistivity can be obtained by varying the concentration of the conductive fillers (Column 12, lines 25-60).

Schlueter, Jr. et al. do not teach that the metal oxide and indium tin oxide particle are present in a weight ratio of 0.01 to 0.1 or that the indium tin oxide particle have a particle size of no greater than 0.1 microns.

However, it would have been obvious to one having ordinary skill in the art to optimize the size and amount of the metal oxide and indium tin oxide particles given that Schlueter, Jr. et al. specifically teach that the desired resistivity can be obtained by varying the concentration of the conductive fillers. ). With regards to the limitation that

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the film is antistatic, the Examiner takes the position that such a property limitation is inherently met by the polyimide film taught by Schlueter, Jr. et al. given that the chemical composition of the film taught by Schlueter, Jr. et al. and that of the claimed invention is identical. Furthermore, with regards to the limitations of claim 13 which recite that the conductive ultrafine particles are firmly held in the film by the metal oxide and thereby allow the surface resistance value to be kept within less than 10-fold compared to the initial value, the Examiner takes the position that such a limitation is met by the electrically conductive doped metal oxide filler containing polyimide film taught by Schlueter given that the chemical composition of the film taught by Schlueter, Jr. et al. and that of the claimed invention is identical.

### ***Response to Arguments***

4. Applicant's arguments with respect to claims 1, 4-13, and 16-24 have been considered but are moot in view of the new ground(s) of rejection.

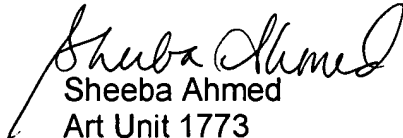
### ***Conclusion***

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sheeba Ahmed whose telephone number is (571)272-1504. The examiner can normally be reached on Mondays and Thursdays from 9:30am to 6:00pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carol Chaney can be reached on (571)272-1284. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Sheeba Ahmed  
Art Unit 1773  
October 31, 2005